

# System Efficiency Relies on Incident Clearance▶

In addition to the tragedy from a collision involving fatalities or serious injuries, the environmental and fiscal costs of highway crashes begin mounting immediately. The Federal Highway Administration (FHWA) estimates that for every minute an incident blocks a lane, it will cause four extra minutes of delay after the incident is cleared. Nationally, each year, traffic incidents are blamed for about 1.4 billion hours of traffic delay that wastes 725 million gallons of fuel, costs \$30 billion in lost economic activity, and produces 16.8 metric tons of carbon dioxide.

For the purpose of performance reporting, Caltrans tracks “major incidents” on the highway, and tabulates the time it takes to clear them from traffic lanes. Caltrans defines major incidents as unplanned, nonrecurring events that reduce highway capacity and require response from both Caltrans and law enforcement personnel. From April to June 2015, Caltrans reported 280 such incidents. Nearly half of them (see chart, p. 24) involved either a fatality, a big rig, a hazardous materials spill, or some combination of the three – the types of incidents that typically cause the longest interruption of traffic. The average clearance time, including such incidents, was 3 hours and 17 minutes. Caltrans’s goal is to clear half of major incidents within 90 minutes, something which it did about a third of the time during the reporting period.

## Average Clearance Time per Occurance (in hours)

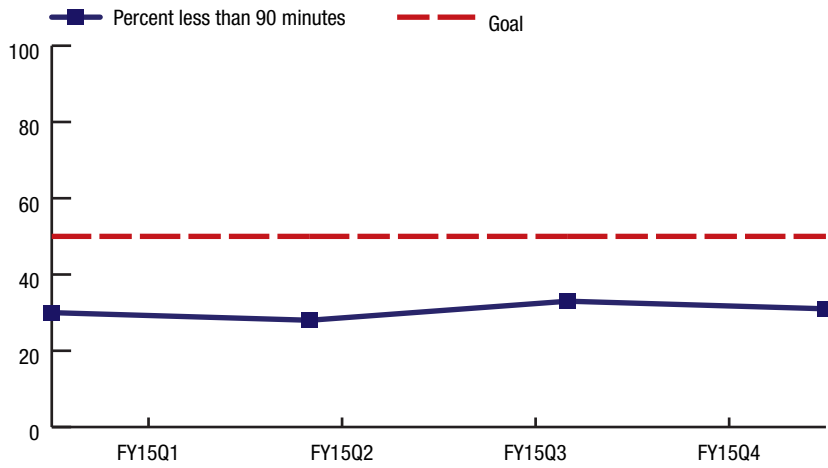
FY15Q1			FY15Q2			FY15Q3			FY15Q4		
Type	No. of Incidents	Avg. Time	Type	No. of Incidents	Avg. Time	Type	No. of Incidents	Avg. Time	Type	No. of Incidents	Avg. Time
Fatal	82	3.08	Fatal	75	3.37	Fatal	68	3.08	Fatal	41	3.91
Big Rig	68	3.55	Big Rig	63	4.55	Big Rig	77	4.44	Big Rig	69	4.78
Hazmat	24	4.72	Hazmat	21	4.53	Hazmat	11	5.55	Hazmat	13	3.58
Other	144	2.41	Other	136	2.61	Other	126	2.65	Other	157	2.44

*This table shows average clearance times, in hours, for fatal, big rig, hazmat, and other incidents for the four quarters of fiscal year 2014–15. “Other” represents major incidents that do not include fatalities, big rigs or hazmat but require at least one highway lane closure and the presence of both Caltrans and law enforcement. These can include injury collisions, guardrail damage, possible explosive device, downed power line or utility pole, police activity, or animals that have been hit on the road. While hazmat incidents are the least frequently occurring, they typically take the longest to clear.*

*Jack-knifed big rig on the Interstate 880/ Interstate 80 connector ramp in Oakland.*



## Incident Clearance Performance (Statewide)



Caltrans has a goal of clearing at least 50 percent of major incidents in 90 minutes or less. This graph shows that during fiscal year 2014–15, about one-third of those incidents were cleared within the targeted time.

Reducing clearance time alone does not necessarily reduce risk to incident responders. An average of one injury accident occurs every three minutes in California. That means about 184,000 injury accidents each year. Each injury crash requires an average of 15 traffic incident responders from highway maintenance, law enforcement, fire and rescue, emergency medical services and towing. That’s about 2.8 million instances in which responders are exposed to traffic while clearing collisions, and in the past five years, 26 of those responders were killed on California’s highways.

Hazmat workers cleaning hazardous chemicals that spilled on 880 in Fremont during a big rig incident. Hazmat incidents typically require the most time to clear.

In keeping with the [National Unified Goal](#), an effort toward safety and efficiency for traffic incident management, Caltrans and its partners are training traffic incident-management responders statewide. By having better communication and coordination between the various responders, the intent is to clear incidents more quickly and more safely. Since 2012, Caltrans and the FHWA have trained 390 California incident responders to be instructors for the FHWA’s National Traffic Incident Management Responder Training. As of July 2015, those instructors have taught 380 classes and trained more than 7,500 California responders. The course teaches national best practices developed under the [Second Strategic Highway Research Program](#). The training is available at no cost to anyone involved in traffic incident response and includes best practices for detecting, verifying, responding to, and clearing traffic incidents.

California has laws dealing with incident clearance. The “[Move Over](#)” law requires motorists to move over or slow down for emergency response vehicles and is punishable by a \$50 fine if violated. The “[Steer Clear](#)” law requires non-injury accidents to clear the roadway if the vehicles are operable and is punishable by up to \$1,000 in fines and six months in county jail if violated. And, the “[Authority Removal](#)” law allows Caltrans to remove a spilled load from the highway and charge the owner for the cost of the removal or to direct a third party to remove the spilled load without threat of liability for damage to the spilled load.

Source: Division of Traffic Operations  
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